

REMARKS

The present amendment is submitted in response to the Office Action dated April 17, 2008.

Claims 1-7 are pending in the application. Claims 1, 4, 6 and 7 are in independent form. Claims 2 – 7 have been amended. In view of the amendments above and remarks to follow, reconsideration and allowance of this application are respectfully requested.

Applicant wishes to point out to the Office that there appears to be an error in the published claims for this application. Specifically, the published claims (claims 1 – 18) for US Patent Application 20050283710, “Coding and Decoding for Rate Matching in Data Transmission”, are apparently directed to a high-pressure discharge lamp. For example, Claim 1 recites, in part : “A device for operating a high-pressure discharge lamp, comprising: a switched-mode power supply circuit”.

Drawing Objection

In the Office Action, the drawings were objected to for failing to comply with 37 CFR 1.21(d) because FIGS. 1, 3-5 contain unlabeled boxes that should be provided with descriptive labels. Applicants respectfully request withdrawal of the drawings objection and approval of the enclosed proposed drawing change including a proper labeling of every circuit block in FIGS. 1, 3-5.

Claim Objections

In the Office Action, Claims 2-5 and 7 were objected to because of the following informalities. The objection of claim 2 is understood to be based on the premise that the phrase, “so that related parity symbols and information symbols” is unclear and cannot be understood. In response, Applicants have amended claim 2 to remove any indefiniteness. The objection of claim 3 is understood to be based on the premise that the phrase,

“cascaded behind the pre-encoding” should read, “cascaded after the pre-encoding”. In response, Applicants have amended claim 3 to remove any indefiniteness. The objection of claim 4 is understood to be based on the premise that the phrase, “...from the information symbols” should read, “...from information symbols”. In response, Applicants have amended claim 4 to remove any indefiniteness. The further objection of claim 4 is understood to be based on the premise that the phrase, “...with a pre-determined interleaving that protects” should read, “...with a pre-determined interleaving scheme that protects”. In response, Applicants have further amended claim 4 to remove any indefiniteness. The objection of claim 5 is understood to be based on the premise that the phrase, “...addresses used...” should read, “...memory addresses...”. In response, Applicants have amended claim 5 to remove any indefiniteness. The objection of claim 7 is understood to be based on the premise that the term, “...read...” should read, “...reading...”. In response, Applicants have amended claim 7 to remove any indefiniteness.

Claim Rejections under 35 U.S.C. §112, first paragraph

The Office has rejected claims 2, and 5-7 on pages 3-4 of the Office Action, under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

The rejection of claim 2 is understood to be based on the premise that the claimed limitation at lines 2-3 of Claim 2, which states, “...the parity symbol generator writing the parity symbols into the interleaving memory...” is contrary to the specification which teaches that “at least parity symbols are supplied to the data input of the first port of memory 30...” and “...First addressing unit supplies addresses for storing these parity symbols...”. Claim 2 has been amended to recite “the parity symbol generator outputting parity symbols to into a first input port of the interleaving memory” instead of “the parity symbol generator writing the parity symbols into the interleaving memory” to more appropriately describe the invention. It is respectfully submitted that the Applicant has

adequately disclosed the structure of the information processing apparatus. Accordingly, withdrawal of the rejection is respectfully requested.

Claim 2 was further rejected, as understood by the Applicant, to be based on the premise that the claimed limitation at lines 4-5 of Claim 2, which states, "...writing and mapping being coordinated to result in interleaving ..." is contrary to the specification which states that reading and mapping of the parity bits results in interleaving and not writing as claimed. Claim 2 has been amended to recite "reading and mapping being coordinated....." instead of "writing and mapping" to more appropriately describe the invention. It is respectfully submitted that the Applicant has adequately disclosed the structure of the information processing apparatus. Accordingly, withdrawal of the rejection is respectfully requested.

The rejection of claim 5 is understood to be based on the premise that the claimed limitation at lines 4-5 of Claim 5, which states, "...writing and mapping being coordinated to result in interleaving..." is contrary to the specification which teaches "reading and mapping being coordinated to result in interleaving...". Claim 5 has been amended to recite "writing and mapping" instead of "reading and mapping..." to more appropriately describe the invention. It is respectfully submitted that the Applicant has adequately disclosed the structure of the information processing apparatus. Accordingly, withdrawal of the rejection is respectfully requested.

The rejection of claim 6 is understood to be based on the premise that the claimed limitation at lines 4-6 of Claim 6, which states, "...the demodulator writing the demodulated information" is contrary to the specification which teaches that the demodulator supplies the demodulated information and it is the de-interleaver that writes and reads from the memory to perform deinterleaving, based on information received from the rate control unit 546. Claim 6 has been amended to recite "...the de-interleaver writing the demodulated information into the memory according to a coding rate

independent address scheme.” Accordingly, withdrawal of the rejection is respectfully requested.

Claim 6 was further rejected based on the premise that the claimed limitation at lines 5-6 of Claim 6, which states, “...according to a coding rate independent address scheme, skipping locations for parity bits that the control unit indicates to have been suppressed by puncturing.” is contrary to the specification which teaches at par. 39 that a predetermined de-interleaving scheme is dependent (not independent as stated in the above excerpt) of the rate of puncturing. The Office Action further states that par. 39 only mentions “a rate of puncturing” not “a coding rate” therefore “a coding rate independent address scheme” was not described in the specification in such a way to enable one skilled in the art to make or use the invention. In response, Applicant points out that the Claim 6 limitation of, “...the de-interleaver supplies the demodulated information into the memory according to a coding rate independent address scheme, skipping locations for parity bits that the control unit indicates to have been suppressed by puncturing.” finds support at par. 32 of the specification which recites,

[0032] In each case the way that the addresses are determined does not depend on the particular coding rate selected by coding rate control unit 17. That is, each parity bit is interleaved with the other parity bits in a predetermined way, selection of those parity bits that are actually used (omitting punctured parity bits) being performed by selecting according to the position "j" of the parity bit in the interleaved order A(j).

It should be understood that the phrase, “in each case” in par. 32 is clarified with reference to Par. 32 which states in part, Also both writing into memory 30 and reading from memory 30 may involve a form of interleaved addressing.

Accordingly, withdrawal of the rejection is respectfully requested.

The rejection of claim 7 is understood to be based on the same rationale used to reject claim 6. Arguments presented above with regard to claim 6 apply with equal force to claim 7.

Claim Rejections under 35 U.S.C. §103(a)

The Office has rejected claims 1, 3 and 4 on page 6 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over United States Patent No. US 6,744,744 (Tong et al. - hereinafter Tong) in view of United States Patent No. US 6,513,140 (Dotsch et al. - hereinafter Dotsch) and further in view of United States Patent No. 6,968,494 (Zhang). Applicant respectfully traverses the rejection.

The cited portions of Tong, Dotsch and Zhang, individually or in combination, do not disclose or suggest the specific combination of claim 1. For example, the cited portions of Tong fail to disclose or suggest an element of claim 1, namely: a control unit for dynamically selecting a coding rate that is to be used by the encoder, wherein the encoder comprises: the interleaving and puncturing unit puncturing the interleaved parity symbols subsequent to said interleaving, **puncturing being controlled dynamically by the selected coding rate.** In contrast to claim 1, Tong discloses that **puncturing controls the coding rate**, which is in exact opposition to the underlined recitation of claim 1 (i.e., puncturing being controlled dynamically by the selected coding rate). The Office Action, at page 6, cites Tong at col. 5, lines 14-26 in view of FIG. 5, where it is stated, “where the puncturing performed by block 95 determines the coding rate.” Therefore, the cited portions of Tong fail to disclose or suggest puncturing being controlled dynamically by the selected coding rate, as in claim 1. The Office does not cite portions of Dotsch or Zhang for disclosing this element of claim 1.

As a further point of distinction it is noted that Tong teaches that a puncturing function 95 is applied only to the channel-interleaved parity bit streams. See Tong at col. 10, lines 44-47. This is different from applying the puncturing function to an interleaved stream of parity and information bits, as recited in claim 1. Specifically, claim 1 recites,

an interleaving and puncturing unit that interleaves the information symbols and parity symbols with a predetermined interleaving scheme for protection against burst errors in the transmission signal, the interleaving and puncturing unit puncturing the interleaved parity symbols **subsequent to said interleaving**, puncturing being controlled dynamically by the selected coding rate.

Therefore, the cited portions of Tong fail to disclose or suggest at least one element of claim 1. Hence claim 1 is allowable.

Claim 3 is allowable at least by virtue of its dependence from claim 1.

The cited portions of Tong, Dotsch and Zhang, individually or in combination, do not disclose or suggest the specific combination of claim 4. For example, the cited portions of Tong fail to disclose or suggest at least the underlined element of claim 4, namely, ...dynamically selecting a coding rate that is to be used for encoding, puncturing the interleaved parity symbols subsequent to said interleaving at a puncturing rate dependent on the dynamically selected coding rate. The Office Action states, at page 9, that claim 4 is rejected based on a rationale similar to the one used to reject apparatus claim 1. Therefore, for at least the reasons stated above, the cited portions of Tong fail to disclose or suggest at least one element of claim 4. Hence claim 4 is allowable.

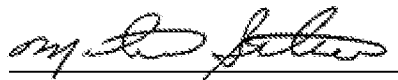
The Office has rejected claims 2 and 5 on page 6 of the Office Action, under 35 U.S.C. § 103(a), as being unpatentable over Tong in view Dotsch and Zhang, as applied to claims 1 and 5 and further in view of United States Patent No. 6,643,331 (Farrell). Claims 2 and 5 depend from claims 1 and 4, respectively, and therefore include the limitations of claims 1 and 4, respectively. Accordingly, for the same reasons given above for claims 1 and 4, claims 2 and 5 are believed to be contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claims 2 and 5 and allowance thereof are respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1- 7 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



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